REMARKS

The Rejections Under Section 112, second paragraph

The office action rejects the terms "substantially" as used in conjunction with isometric body shape, and "predominantly" (not currently used in the claims) as used in conjunction with two-dimensional shape as allegedly indefinite. Applicants respectfully disagree. "The degree of precision necessary for adequate claims is a function of the nature of the subject matter." *Miles Labs. v. Shandon*, 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993). In the art of pigments, one of ordinary skill in the art readily understands the scope and meaning of these terms when used in conjunction with the body shape of the pigments. Nothing more is required.

Additionally, "[t]hat some claim language may not be precise . . . does not automatically render a claim invalid. When a word of degree is used ... [one] must determine whether the patent's specification provides some standard for measuring that degree." See *Seattle Box v. Industrial Crating & Packing,* 731 F.2d 818, 221 USPQ 568 (Fed. Cir. 1984). The specification here provides guidance in the matter when stating that "deviations from the ideal spherical shape are possible, but the filler particles should predominantly have virtually isometric shapes. This means that the dimensions of the particles are approximately the same in all three spatial directions." See specification page 3, lines 18-21.

Furthermore, several courts have addressed the definiteness issue with respect to the term "substantially." See *Andrew Corp. v. Gabriel Electronics, Inc.,* 847 F.2d 819, 6 USPQ2d 2010 (Fed. Cir. 1988) where the court stated that "the criticized words [including "substantially equal" among others] are ubiquitous in patent claims. Such usages, when serving reasonably to describe the claimed subject matter to those of skill in the field of the invention, and to distinguish the claimed subject matter from the prior art, have been accepted in patent examination and upheld by the courts. *See also Amtel Corp. v. Information Storage Devices, Inc.,* 997 F.Supp. 1210, 1228 (N.D.Cal. 1998) (holding term "substantially all" not to be indefinite); *Pave Tech, Inc. v. Snap Edge Corp.,* 952 F.Supp. 1284, 1292 (N.D.Ill. 1997) (term "substantial,"

when considered in light of entire claimed invention, was as accurate as subject matter permitted, and provided sufficient guidance to one skilled in the art); *James River Corp. of Virginia v. Hallmark Cards,* 915 F.Supp. 968, 989 (E.D.Wisc. 1996) (word "substantially" in term "substantially integrated" was sufficiently defined, since one skilled in the art could recognize the difference between prior art and the claimed invention); *BOC Health Care, Inc. v. Nellcor Corp.,* 892 F.Supp. 598, 613 (D.Del. 1995) (finding phrase "substantially planar" to be sufficiently defined to those skilled in the art to avoid invalidity), *aff'd,* 98 F.3d 1357 (Fed. Cir. 1996); *Tuff Torq Corp.,* 1994 WL 827767 *12-13 (denying motion for summary judgment of indefiniteness with respect to term "substantially level").

Reconsideration is respectfully requested.

The Rejections Under Section 102

Claims 1-9 and 11-20 were rejected as allegedly anticipated by Solms et al.

Solms teaches "platelet-form substrates" as the filler material. See column 2, lines 13-22 and 47-53. "Platelet-form substrates" do not anticipate substantially isometric body shape filler particles. For example, something in "platelet-form" does not, by definition, have approximately the same dimensions in all three spatial directions.

Claims 1-14 and 17-19 were rejected as allegedly anticipated by Griessmann et al.

Contrary to the allegations that Griessmann teaches that the plastic part comprises 0.1-10% filler, Griessmann teaches that the pigment preparation contains 0.1-10% filler, i.e., redispersant. See column 3, lines 20-27. The amount of pigment preparation in the plastic part is not taught by Griessmann. Thus, Griessmann does not give guidance in how much filler is in the plastic.

The court in *In re Sivaramakrishnan*, 673 F.2d 1383, 213 USPQ 441 (CCPA 1982), recognized that "in cases involving an overlap of a claimed invention and applied prior art, anticipation under 35 U.S.C. 102 can arise even though

an applied reference does not exemplify a species falling within the overlap. Anticipation under 35 U.S.C. 102 in such cases would appear to depend upon the extent of overlap which determines the amount of picking and choosing necessary to arrive at the claimed invention." (emphasis added) The amount of picking and choosing in the present case is large and prohibits the finding of anticipation.

One of ordinary skill in the art viewing the references broad disclosure sees that Griessmann teaches a pigment preparation containing "0.1 to 10% by weight, preferably from 0.05 to 5% by weight and, in particular, from 0.01 to 3% by weight, based on the pigment." (Emphasis added.) See column 3, lines 21-27. Additionally, the reference teaches that good dissolution results are achieved with pigment preparation granules having a content of 0.5% by weight of spherical particles when used in printing inks (not plastic compositions). See column 6, lines 8-15. The objective of this component is to act as a redispersant, and as known and disclosed by the reference, even very small amounts are sufficient to achieve this objective. There is no motivation to add higher amounts than needed to achieve the disclosed objection.

Furthermore, the only example directed to a preparation containing spherical particles is example 4, wherein 300g of hollow glass beads are brought into a composition with 30 kg of pigment particles and 7.5 kg of aldehyde resin. Thus, the pigment preparation of the example contains [300g of hollow glass beads/(total pigment preparation weight = 30,000g of pigment particles + 7,500g of aldehyde resin, and 300g of hollow glass beads = 37,800) * 100 = .79% glass beads / total pigment preparation (not plastic composition)]. It is readily appreciable that if this exemplified pigment composition were to be used in a plastic composition, the amount of glass beads in the total composition would be significantly lower.

Furthermore, the reference, while mentioning the use of these pigments in plastics, does not motivate an artisan to such use. The reference on column 2, lines 5-14 teaches that

> The object of the present invention was therefore to provide pigment preparations, in particular in the form of pastes and dry preparations, which can be used to very good effect in solvent-

> containing coating systems, possess high stability, are readily redispersed, and at the same time feature a high level of compatibility with the other components of the coating system. Furthermore, the pigment preparation of the invention ought also to be suitable for producing dry preparations in the form, for example, of pellets, granules, etc.

No mention of plastic is made therein, nor of any of the advantages achieved with the present invention. The only reference to possible use in a plastic formulations is on column 6, lines 28-30, among other uses, after more extensive discussion of uses in coating compositions. See column 6, lines 15-27, especially lines 16-18, stating that the pigment preparation is "preferably employed in coating systems from the sectors of printing, especially offset printing and intaglio printing."

No motivation for the required selections is made in the reference to achieve the presently claimed plastics. Thus, not only is there no anticipation, but there is also no obviousness.

The Federal Circuit in a more recent case stated that "to anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." (emphasis added) *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383, 58 USPQ2d 1286 (Fed. Cir. 2001). The reference does not arrange the elements and the limitations of the claimed invention in a way which would teach or suggest to one of ordinary skill in the art to make the plastics of the claimed invention. The reference does not disclose any individual embodiment with sufficient specificity to lead one of ordinary skill in the art to the claimed invention. Thus, the claims are not anticipated or even obvious over this reference.

With respect to a possible obviousness issue, although not admitted to be present, "the fact a claimed product might be found within the broad field of the prior art and one might arrive at it by selecting specific items and conditions does not render the product obvious in the absence of some direction or reasons for making the selection." *See Ex parte Koon*, 132 U.S.P.Q. 359 (PBAI 1962) and *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994).

The fact scenario of *Baird* is fully applicable in the present situation. The

Federal Circuit in *Baird* decided that a compound was not obvious over the disclosure of the prior art disclosure that taught a generic formula encompassing a vast number of compounds. In *Baird* the reference taught compounds that were "typical," "preferred," and "optimum" which were different from the claimed compound. Analogously here, the reference teaches through preferences and through examples, compositions that are not plastics. Also, it exemplifies only a single embodiment of a pigment composition having spherical filler components, albeit not within the claimed range if such were even used in a typical plastic composition (for which no motivation is present).

In the context of "written disclosure" issues, courts have analogized a disclosure to a forest where one needs description to direct one to the claimed subject matter by looking to "blaze marks" on specific trees that mark a trail through a forest. *See In re Ruschig,* 379 F.2d 990, 994-95, 154 USPQ 118 (CCPA 1967). Without such specific direction, a general disclosure is not sufficient to anticipate selected claimed subject matter. *See Fujikawa v. Wattanasin,* 93 F.3d at 1571, 39 USPQ2d 1895 (CAFC 1996). Analogously, if a reference fails to provide "blaze marks," i.e., written description, to the claimed invention, it follows that such reference does not provide the description, i.e., the motivation, to one of skill in the art to the invention. The reference, as discussed above, has a very broad disclosure, i.e., a large forest, but fails to guide one of skill in the art to the claimed invention, i.e., it lacks "blaze marks" to the claimed invention. If anything, the reference guides one away from the plastic compositions of the present claims by directing the attention of one of skill in the art to the preferred and exemplified compositions, which are not in accord with the present invention.

Claims 1-3, 11 and 14-20 were rejected as allegedly anticipated by Ittmann et al.

Sivaramakrishnan, *Karsten Mfg. Corp. v. Cleveland Golf Co.*, *Ruschig,* and *Fujikawa v. Wattanasin,* supra, are fully applicable as discussed earlier.

Ittmann teaches broadly a plastic which contains A) 80-20 parts by weight (pbw) of a polymer precursor; B) 0-75, preferably 40-75 pbw of particulate filler; C)

0-5 pbw (based on the sum of A and B) of an adhesion promoter; and D) 0-2 wt. % of one or more pigments or colorants; wherewith the aforesaid metallic-appearing particles are of a platelet-like stratified silicate used in the amount of 1-35 pbw (based on the sum of A and B). See column 2, lines 1-22. Component D has platelet-like stratified silicate particles. These particles are not substantially isometric in body shape. With respect to component B, the filler particles, the reference teaches 0-75 pbw broadly and preferably 40-75 pbw. One of ordinary skill in the art based on the guidance provided would not be motivated to select 0 pbw filler particles or amounts in the lower half of the disclosed range, for example, even though the broad teachings cover the same. The title of the Ittmann reference is "Method for producing **high filler content plastic molded articles** which resemble granite." (Emphasis added.) Thus, having 0 (expressly taught by the reference broadly) or low amounts of filler are contrary to even the title of the reference. Ittmann teaches that preferably, the amount of component B) is 40-75 pbw. See column 2, line 9. Ittmann also teaches that preferably the sum of A and B is 100 pbw, see column 2, lines 21-22, wherein A is 80-20 pbw, see column 2, line 7 (i.e., leaving component B at least being 20 pwb based on this preference). By example, Ittmann teaches a plastic that contains 65.4 % filler (example 1).1 Minor variations are only made in the compositions in the examples that follow. See examples 2-4.

Additionally, the reference is silent on the shape of the fillers. Nothing in the reference indicates that substantially isometric body shape filler particles should be used.

Nothing in the reference motivates an artisan to prepare a composition in accord with the currently claimed invention. Thus the reference does not anticipate and also does not render obvious the presently claimed invention.

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1 [280 g cristobalite (filler)]/[104 g methyl methacrylate + 2 g ethylene glycol dimethacrylate + 8 g gamm-methacryloyloxypropyl trimethoxysilane + 0.2 g n-butylamine + 280 g cristobalite (filler)] = 71.0 wt % filler in first mixture (see column 6, lines 13-27). To 200 g of the previous mixture was added several other components (see column 6, lines 28-40). [200 g first mixture * .71 wt % filler/first mixture]/[6 g of a copolymer of methyl methacrylate and methyl acrylate + 10 g silver "Decor-Pigment" + 1.2 g bis(4tert-butylcyclohexyl)peroxydicarbonate + 200 g first mixture] = 65.4 % filler in mixture to be molded.

With respect to dependent claim 13, wherein the filler particles are specified to have a smooth surface, the reference teaches that the filler particles are prepared by crushing and milling. The specification of the present application teaches that when ground filler particles are used (grinding can be achieved by milling), the surface thereof is rough. See page 3, lines 21-24. Thus, this claim is further distinguished.

Claims 1, 4-7, 10, 12-14 and 17-20 were rejected as allegedly anticipated by Schoen et al.

Schoen teaches a pigment mixture containing at least two components, i.e., component A being SiO_2 flakes coated with one or more metal oxides and/or metals and component B being platelet-shaped, acicular or spherical colorants and/or fillers. See column 1, lines 5-10. Schoen teaches that "Colorants suitable as component B for the pigment mixture of the invention are all acicular and spherical colorants which ... have a particle size of about 0.001 to 10 μm, preferably about 0.01 to 1 μm. The pigment mixtures of the invention preferably comprise, as colorants, absorption materials and/or fillers." See column 2, lines 21-27. Only in the case of cosmetic formulations does the reference teach that "not only colorants and SiO_2 flakes, but also fillers" are included in the formulations. See column 2, lines 37-43. No guidance with respect to size and/or shape of these fillers is provided by the reference.

Nothing in the reference teaches or suggests fillers that have a diameter of 15 to 150 μm. Thus, the claims are not anticipated or obvious over Schoen.

The Rejections Under Section 103

Claims 15-16 are rejected as allegedly unpatentable over Griessmann in view of Schoen.

Applicants do not burden the record with arguments at this point since these claims are dependent claims and should be readily found allowable once the claims they depend from are found allowable.

No admission with respect to the allegations is made.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,

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